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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/935,235	08/22/2001	Andreas Kellner	DE000126	8684

24737 7590 12/13/2005

PHILIPS INTELLECTUAL PROPERTY & STANDARDS
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EXAMINER

CHAWAN, VIJAY B

ART UNIT PAPER NUMBER

2654

DATE MAILED: 12/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/935,235	Applicant(s) KELLNER ET AL.	
	Examiner Vijay B. Chawan	Art Unit 2654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-9 are rejected under 35 U.S.C. 103(a) Kishi et al., (EP 0 094 449 A1) in view of Goldberg et al., (5,970,446).

As per claim 1, Kishi et al., (EP 0 094 449) teach a method of controlling function units of a motorcar, or of devices (1a, 1b) installed in a motorcar, by means of speech signals, the method comprising the steps of:

receiving acoustic signals occurring in the motorcar, which contain noise signal portions that depend on the operating state and/or operation environment of the motorcar and speech signal portions (page 5, line 13 – page 6, line 17, page 10, lines 2-19); and,

applying the received acoustic signals to a speech recognition system (3) (page 5, line 13 – page 6, line 17, page 10, lines 2-19).

Kishi et al., however, do not specifically teach a speech recognition system using acoustic references (8), which are selected and/or adapted in dependence on estimated

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noise component introduced by the operating state and/or operation environment.

Goldberg et al., do teach a speech recognition system using acoustic references, which are selected and/or adapted in dependence on estimated noise component introduced by the operating state and/or operation environment (Col.2, lines 8-53).

Therefore, it would have been obvious to one with ordinary skill in the art at the time of invention to use the method of estimating noise component introduced by the operating state and/or environment as disclosed by Goldberg et al., in the method of Kishi et al., because, an artisan would readily recognize that this would provide a robust speech recognition system that would effectively function in various noisy backgrounds (Goldberg et al., Col.1, lines 61-63).

As per claim 2, Kishi et al., teach a method as claimed in claim 1, wherein acoustic basic reference (20-1, ..., 20-n, 30-1, ..., 30-n) are selected to be used for a speech pause modeling in dependence on the operating state and/or the operation environment of the motorcar (page 5, line 13 – page 6, line 22).

As per claim 3, Kishi et al., teach a method as claimed in claim 2, wherein an adaptation is provided (22, 32-1, ..., 32-n) of the selected acoustic basic references in dependence on the operating state and/or operation environment of the motorcar (page 5, line 13 – page 6, line 22, page 7, line 15 – page 8, line 14).

As per claim 4, Kishi et al., teach a method as claimed in claim 1, wherein for the speech pause modeling, acoustic basic references are combined (31) in dependence on the operating state and/or operation environment of the motorcar (page 10, lines 2-13).

As per claim 5, Kishi et al., teach a method as claimed in claim 1, further comprising the step of determining operating state and/or operation environment of the motorcar from an on-board computer (11) of the motorcar and/or by means of one or more detectors (13) installed in the motorcar (abstract, page 15, line 16 – page 16, line 5).

As per claim 6, Kishi et al., teach a method as claimed in claim 1, wherein parts of a vocabulary (9) of the speech recognition system (3) are determined (13) that represent speech control signals that have their effect on the control of function units of the motorcar or on devices installed inside the motorcar (page 5, line 13 – page 6, line 17, page 10, lines 2-19).

As per claim 7, Kishi et al., teach an arrangement for controlling function units of a motorcar, or of devices (1a, 1b) installed in a motorcar by means of speech signals, the arrangement:

comprising at least one microphone (2) for converting acoustic signals occurring in the motorcar, which acoustic signals contain noise signal portions that depend on the operating state and/or operation environment of the motorcar and, as the case may be, speech signal portions, and, a speech recognition system (3) coupled to the microphone (2) for recognizing speech signal portions of the acoustic signals (page 5, line 13 – page 6, line 17, page 10, lines 2-19).

Kishi et al., however, do not specifically teach a speech recognition system using acoustic references (8), which are selected and/or adapted in dependence on estimated noise component introduced by the operating state and/or operation environment.

Goldberg et al., do teach a speech recognition system using acoustic references, which are selected and/or adapted in dependence on estimated noise component introduced by the operating state and/or operation environment (Col.2, lines 8-53).

Therefore, it would have been obvious to one with ordinary skill in the art at the time of invention to use the system of estimating noise component introduced by the operating state and/or environment as disclosed by Goldberg et al., in the arrangement of Kishi et al., because, an artisan would readily recognize that this would provide a robust speech recognition system that would effectively function in various noisy backgrounds (Goldberg et al., Col.1, lines 61-63).

As per claim 8, Kishi et al., teach a method for controlling a device via speech signals, in which acoustic signals which contain noise signal portions that depend operating state of the device and/or the operation environment of the device and, as the case may be, speech signal portions, are applied to a speech recognition system (page 5, line 13 – page 6, line 17, page 10, lines 2-19).

Kishi et al., however, do not specifically teach a speech recognition system using acoustic references (8), which are selected and/or adapted in dependence on estimated noise component introduced by the operating state and/or operation environment. Goldberg et al., do teach a speech recognition system using acoustic references, which are selected and/or adapted in dependence on estimated noise component introduced by the operating state and/or operation environment (Col.2, lines 8-53).

Therefore, it would have been obvious to one with ordinary skill in the art at the time of invention to use the method of estimating noise component introduced by the

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operating state and/or environment as disclosed by Goldberg et al., in the method of Kishi et al., because, an artisan would readily recognize that this would provide a robust speech recognition system that would effectively function in various noisy backgrounds (Goldberg et al., Col.1, lines 61-63).

As per claim 9, Kishi et al., teach an arrangement comprising a device for controllable via speech signals, in which acoustic signals which contain noise signal portions that depend operating state of the device and/or the operation environment of the device and, as the case may be, speech signal portions, are applied to a speech recognition system (page 5, line 13 – page 6, line 17, page 10, lines 2-19).

Kishi et al., however, do not specifically teach a speech recognition system using acoustic references (8), which are selected and/or adapted in dependence on estimated noise component introduced by the operating state and/or operation environment. Goldberg et al., do teach a speech recognition system using acoustic references, which are selected and/or adapted in dependence on estimated noise component introduced by the operating state and/or operation environment (Col.2, lines 8-53).

Therefore, it would have been obvious to one with ordinary skill in the art at the time of invention to use the method of estimating noise component introduced by the operating state and/or environment as disclosed by Goldberg et al., in the method of Kishi et al., because, an artisan would readily recognize that this would provide a robust speech recognition system that would effectively function in various noisy backgrounds (Goldberg et al., Col.1, lines 61-63).

Response to Arguments

3. Applicant's arguments filed 9/19/25 have been fully considered but they are not persuasive.
4. Applicant's arguments with respect to claims 1-9 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Nevins et al., (5,949,886) teaches setting a microphone volume level depending on the environmental operating state.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any


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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vijay B. Chawan whose telephone number is (571) 272-7601. The examiner can normally be reached on Monday Through Friday 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571) 272-7602. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Vijay B. Chawan
Primary Examiner
Art Unit 2654

vbc
12/10/05

**VIJAY CHAWAN
PRIMARY EXAMINER**